

ABSTRACT

The present invention provides for nucleic acid sequences that encode novel mammalian intracellular signaling polypeptides, designated MURF1, MURF3, or MA-61. The invention also provides assay systems that may be used to detect and/or measure agents that bind the MURF1 or MAFBX gene product. The present invention also provides for diagnostic and therapeutic methods based on the interaction between MURF1 or MAFBX and agents that initiate signal transduction or inhibition of ubiquitination through binding to MURF1 or MA-61, inhibiting the mRNA expression of MURF1, MURF3, or MA-61, or inhibiting the MURF1, MURF3, or MAFBX pathway